

WHAT IS CLAIMED IS:

1. A method for maintaining synchronization in a communication system wherein a central entity transmits a signal containing timing information to one or more remote devices, the one or more remote devices using the timing information for scheduling transmissions, the method comprising:

synchronizing a first symbol clock and a second symbol clock;

transmitting a first signal to the one or more remote devices, wherein the first signal includes timing information based on the first symbol clock; and

upon termination of transmission of the first signal to the one or more remote devices, transmitting the second signal to the one or more remote devices, wherein the second signal includes timing information based on the second symbol clock.

2. The method of claim 1, further comprising:

transmitting a notification message to the one or more remote devices indicating that the first signal will be terminated prior to the termination of transmission of the first signal.

3. A method for maintaining synchronization in a communication system wherein a central entity transmits a signal containing timing information to one or more remote devices, the one or more remote devices using the timing information for scheduling transmissions, the method comprising:

synchronizing a first symbol clock and a second symbol clock;

transmitting a first signal to the one or more remote devices, wherein the first signal includes timing information based on the first symbol clock and data having a first forward error correction (FEC) alignment; and

upon termination of transmission of the first signal to the one or more remote devices, transmitting the second signal to the one or more remote devices, wherein the second signal includes timing information based on the

second symbol clock and data having a second FEC alignment that is synchronized with the first FEC alignment.

4. The method of claim 3, further comprising:

transmitting a notification message to the one or more remote devices indicating that the first signal will be terminated prior to the termination of transmission of the first signal.

5. A method for maintaining synchronization in a communication system wherein a central entity transmits a signal containing timing information to one or more remote devices, the one or more remote devices using the timing information for scheduling transmissions, the method comprising:

synchronizing a first symbol clock and a second symbol clock;

transmitting a first signal to the one or more remote devices, wherein the first signal includes timing information based on the first symbol clock and data having a first forward error correction (FEC) alignment;

generating a second signal that includes timing information based on the second symbol clock and data having a second forward error correction (FEC) alignment;

transmitting calibration information relating to a difference between the first FEC alignment and the second FEC alignment to the one or more remote devices; and

upon termination of transmission of the first signal to the one or more remote devices, transmitting the second signal to the one or more remote devices.

6. The method of claim 5, further comprising:

generating the calibration information by comparing the first FEC alignment to the second FEC alignment.

7. The method of claim 5, further comprising: -

generating the calibration information, wherein generating the calibration information comprises generating first calibration data by comparing the first FEC alignment to a reference FEC alignment and generating second calibration data by comparing the second FEC alignment to the reference alignment.

8. The method of claim 5, further comprising:  
transmitting a notification message to the one or more remote devices indicating that the first signal will be terminated prior to the termination of transmission of the first signal.
9. An apparatus in a communication system, the apparatus comprising:  
a first transmitter adapted to transmit a first signal to one or more remote devices, wherein the first signal includes first timing information based on a first symbol clock;  
a second transmitter adapted to transmit a second signal to the one or more remote devices in response to the first transmitter terminating transmission of the first signal, wherein the second signal includes second timing information based on a second symbol clock; and  
a synchronization element adapted to synchronize the first symbol clock and the second symbol clock.
10. The apparatus of claim 9, wherein the first transmitter transmits a notification message to the one or more remote devices indicating that the first signal will be terminated prior to termination of transmission of the first signal.
11. The apparatus of claim 9, wherein the apparatus is a cable modem termination system (CMTS).
12. An apparatus in a communication system, the apparatus comprising:

a first transmitter adapted to transmit a first signal to one or more remote devices, wherein the first signal includes first timing information based on a first symbol clock and first data having a first forward error correction (FEC) alignment;

a second transmitter adapted to transmit a second signal to the one or more remote devices in response to the first transmitter terminating transmission of the first signal, wherein the second signal includes second timing information based on a second symbol clock and second data having a second FEC alignment that is synchronized with the first FEC alignment; and

a synchronization element adapted to synchronize the first symbol clock and the second symbol clock.

13. The apparatus of claim 12, wherein the first transmitter transmits a notification message to the one or more remote devices indicating that the first signal will be terminated prior to termination of transmission of the first signal.

14. The apparatus of claim 12, wherein the apparatus is a cable modem termination system (CMTS).

15. An apparatus in a communication system, the apparatus comprising:

a first transmitter adapted to transmit a first signal to one or more remote devices, wherein the first signal includes first timing information based on a first symbol clock and first data having a first forward error correction (FEC) alignment;

a second transmitter adapted to transmit a second signal to the one or more remote devices in response to the first transmitter terminating transmission of the first signal, wherein the second signal includes second timing information based on a second symbol clock and second data having a second FEC alignment that is synchronized with the first FEC alignment; and

a synchronization element adapted to synchronize the first symbol clock and the second symbol clock;

wherein at least one of the first transmitter and the second transmitter is adapted to transmit calibration information relating to a difference between the first FEC alignment and the second FEC alignment to the one or more remote devices.

16. The apparatus of claim 15, further including a calibration element adapted to generate the calibration information by comparing the first FEC alignment and the second FEC alignment.

17. The apparatus of claim 15, further including a calibration element adapted to generate the calibration information by comparing the first FEC alignment to a reference FEC alignment and by comparing the second FEC alignment to the reference alignment.

18. The apparatus of claim 15, wherein the first transmitter transmits a notification message to the one or more remote devices indicating that the first signal will be terminated prior to termination of transmission of the first signal.

19. The apparatus of claim 15, wherein the apparatus is a cable modem termination system (CMTS).